

22. (Amended Once) The transgenic host cell of Claim 21 wherein the DNA encodes a dicamba-degrading oxygenase having the amino acid sequence of SEQ ID NO:4.

36. (Amended Once) A transgenic plant or part of a plant comprising one or more cells comprising DNA encoding a dicamba-degrading oxygenase, said DNA being operatively linked to expression control sequences.

37. (Amended Once) The transgenic plant or plant part of Claim 36 wherein the DNA encodes a dicamba-degrading oxygenase having the amino acid sequence of SEQ ID NO:4.

44. (Amended Once) A method of controlling weeds in a field containing a transgenic plant according to any one of Claims 36-39 comprising applying an amount of dicamba to the field effective to control the weeds in the field.

47. (Amended Once) A method of selecting transformed plant cells comprising:
providing a population of plant cells;
transforming at least some of the plant cells in the population of plant cells with a DNA construct according to any one of Claims 4-7; and
selecting the transformed plant cells by culturing the resulting population of plant cells in a culture medium containing dicamba at a concentration selected so that transformed plant cells proliferate and untransformed plant cells do not proliferate.

48. (Amended Once) A method of selecting transformed plants comprising:
providing a population of plants which may comprise one or more plants comprising a DNA construct according to any one of Claims 4-7; and
selecting transformed plants by applying an amount of dicamba to the population of plants selected so that transformed plants grow, and growth of untransformed plants is inhibited.

REMARKS

This paper is being filed in response to the Office Action dated January 30, 2001. After the above amendments, Claims 1-7, 21-24, 36-39, 44 and 47-48 are pending. Accompanying this paper is the Declaration Of Donald P. Weeks ("Weeks Declaration) and a new inventors' declaration under 37 C.F.R. § 1.67.